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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/720,895	03/05/2001	Peter William De la Marche	7399-2	7146

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EXAMINER

THISSELL, JENNIFER I

ART UNIT

PAPER NUMBER

3635

DATE MAILED: 09/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/720,895	DE LA MARCHE 
Examiner	Art Unit	
Jennifer I Thissell	3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 05 March 2001.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 22-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 22-35 and 37-42 is/are rejected.
- 7) Claim(s) 36 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

It should be noted that the pre-amendment filed June 19, 2001 that cancelled claims 1-24 and added claims 25-45, should have cancelled claims 1-21 since those were the only claims originally filed. The newly added claims have been renumbered and will be referred to as claims 22-42.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: grommet 26, two collars 27.

The drawings must show every feature of the invention specified in the claims. Therefore, the “foundation of foamed mineral in-fill” must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities: on page 6, line 16, the reference numeral “14” is incorrectly used to represent “bores” that were previously designated 24. “Connection point housings” in the same line are also designated incorrectly.

Appropriate correction is required.

Claim Objections

Claim 24 is objected to because of the following informalities: the preamble that recites “according to claims 22 or 23” should read “according to *claim* 22 or 23”. This objection also applies to claim 40. The preamble of claim 25 that recites, “according to any one of claim 22”, should read “according to *claim* 22”.

Claim 28 is objected to because the holding tank should be “*capable of being* connected to a lavatory or wash area of an adjacent building module”, because the building modules are never actually claimed as being connected to the service modules.

Claim 31 is objected to because the heat exchanger of the building module should be “*capable of being* connected to the pump and heat exchanger of an adjacent service module”, because the building modules are never actually claimed as being connected to the service modules.

Claim 37 is objected to because “attached to adjacent module” should read similar to “attached to *an* adjacent module”.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 22-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 22 it is unclear as to the meaning of the phrase "pre-fitted for its intended use".

Claim 25 is indefinite because it further limits the building module, which is recited only as part of the functional language in claim 1.

In claim 29 it is unclear as to what the holding tanks are connected to, and if it is the wash area of an adjacent building module, then this should be further clarified since the adjacent building modules are only claimed as functional language.

Claim 32 is indefinite because it recites "each adjoining pair of building modules *or* service modules". If one were to select the building modules, then the further limitation of the apparatus for connecting adjacent modules would only further describe an element that was claimed as part of the functional language.

It is generally unclear whether applicant intends to claim the combination of the service module and the separate building modules, or just the service module, since the building modules are originally claimed in the functional language (i.e. "for connection to separate building modules"). The

claim then states that each building module is connected to one of the connection nodes.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 22, 23, 25-27, 32, and 35 are rejected, as understood, under 35 U.S.C. 102(b) as being anticipated by Antoniou ('666). Antoniou teaches a service module 15 that defines a plurality of connection nodes (71 in Figure 1), the service module contains an apparatus 36 for the supply and distribution of at least one main service (the lines running through/under 36), and the service module is in the form of a corridor walkway that links building modules 24. Each module is an open-ended box configuration (Figure 1), it is considered sectional because it can be defined as having different sections, it can be extended or shortened depending on the length that is desired, there can be a plurality of service modules in transverse directions because large building structures have supply lines that extend in all directions throughout the structure. The main service can include heating systems, telephone cables,

television, radio, other communication systems, water, sewer, air conditioning, and other utilities (column 1, lines 26-29).

A site is prepared in which the building is located, a service module is installed on the site, at least one main supply is installed to the service module, a building module 23 is connected to a connection node (lowermost to the right) and the building module is connected to the main supply service by way of 17.

Claims 37 and 38 are rejected, as understood, under 35 U.S.C. 102(b) as being anticipated by Needham ('579). Needham teaches an apparatus for connecting adjacent building modules comprising a housing with an aperture 13 that extends into at least one building module and a flexible resilient insert 11 attached to an adjacent module (Figure 2), the insert is received in the aperture and supported on a fixing element 12 that is secured to the adjacent module, each module has an aperture in which the insert bridges the two modules.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary

skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 24 and 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Antoniou ('666). Antoniou teaches a system as stated above, but without cavities in the floor of the service module for supply lines to be routed. Figure 2 depicts the service module and the supply lines that are fed through the module, some lines are provided in cavities of the ceiling of the module, and others are brought further down because of lack of space in the ceiling. It would have been obvious to one having ordinary skill in the art at the time the invention was made to extend some lines further down so as to run them through cavities of the module at the floor, since this provide additional space for supply lines that may be lacking at the top of the module.

Antoniou does not specifically state that there is a holding tank with the waste disposal service or a heat exchanger and external pump with the air conditioning system. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a holding tank with the waste system and a heat exchanger and external pump with the air conditioning system, since holding tanks and heat exchangers and pumps are commonly associated with waste line systems and air conditioning systems, respectively. The tank allows for increased capacity of the system and the exchanger and pump aid in maintaining the proper function of the system.

Claims 37 and 39-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van der Lely ('327). Van der Lely teaches an apparatus for connecting adjacent building modules with an aperture 126,127 in each building module, and a fixing element 29 that is secured to the adjacent module. The modules are vertically adjacent, there is an access chamber that is open to the inside of the module (at 128,129), and the apparatus is in the floor or ceiling of the modules. Van der Lely does not disclose a grommet that is flexible and resilient and that is attached to the adjacent module, however, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a grommet of flexible and resilient material around the connecting member/fixing element, since this would act as a cushion or padding around the connecting member/fixing element. Grommets are typically used in the building industry for the protection or reinforcement of an opening, therefore this would provide the connection site with increased protection from wear on the connection and the aperture.

Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Antoniou ('666) in view of Van der Lely et al. ('327). Antoniou teaches a system with multiple stories, but does not disclose the precise way by which the modules are connected. Van der Lely teaches a connection system for building modules as stated above. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use Van der Lely's type of

connection with Antoniou's modules, since this would provide a simple and accessible connection for building modules. This type of connection could be utilized at almost any part of the module.

Allowable Subject Matter

Claim 36 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 34 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Prior art fails to teach or reasonably disclose a modular building structure and method of constructing such structure, whereby the modules are connected to a foundation of foamed mineral in-fill, and the step of filling a clearance between the module and ground with a foundation of foamed mineral in-fill, respectively.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer I Thissell whose telephone

number is (703) 306-5750. The examiner can normally be reached Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Friedman can be reached on (703) 308-0839. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9326 for regular communications and (703) 872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2168.

JIT

September 9, 2002



Carl D. Friedman
Supervisory Patent Examiner
Group 3600